



بسم الله الرحمن الرحيم

SAFETY INSTRUCTIONS

Al-Saqri Corporation For Military Sciences

General Safety

Manufacturing explosives is extremely dangerous. Homemade explosives are far more sensitive and unpredictable than commercially available ones. One must approach the preparation and handling of explosives with great care. Here is a list of some equipment you must have to make these operations as safe as possible.

Goggles – Eye protection is a must. Not only are most of the chemicals potentially damaging, but the risk of accidental fire and/or explosion is very real. Most hardware stores sell safety goggles and safety glasses.

Gloves – Be sure to use rubber gloves when handling and mixing explosives especially when working with acids and oxidizers. Consider a pair of welder's gloves when handling particularly sensitive compounds such as flash powder.

Apron – An apron will give you some protection against chemical splashes and fires.

Fire Extinguisher – This is an absolute must for obvious reasons.

Respirator – Get a good quality respirator as most of the dusts and chemical fumes you will be exposed to are quite toxic. Be sure to select a cartridge type respirator and not one of those cheap paper masks.

Storage of Blasting Caps – Always store blasting caps away from other explosives and preferably in a big sand barrel when not used , and make sure both positive and negative wire ends are connected to each other to assure a closed circuit.

Safety Tips

Safety and skill in the handling and use of explosives cannot be learned by trial and error! First error is the last error.

Safety "Do's and Don'ts"

When Using Explosives

Don't use sparking metal tools to open kegs or wooden cases of explosives. Metallic slitters may be

used for opening fiberboard cases, provided that the metallic splitter does not come in contact with the metal fasteners of the case.

Don't smoke or have any matches or any source of fire or flame within 100 feet of an area in which explosives are being handled or used.

Don't place explosives where they may be exposed to flame, excessive heat, sparks or impact.

Do replace or close the cover of explosives cases or packages after using.

Don't carry explosives in the pockets of your clothing or elsewhere on your person.

Don't insert anything but fuse in the open end of a blasting cap.

Don't strike, tamper with, or attempt to remove or investigate the contents of a blasting cap or an electric blasting cap, or try to pull the wires out of an electric cap.

Don't allow children or unauthorized or unnecessary persons to be present where explosives are being handled or used.

Don't use explosives or accessory equipment which is obviously deteriorated or damaged.

Don't attempt to reclaim or to use fuse, blasting caps, electric blasting caps or any explosives that have been water soaked, even if they have dried out. Consult the manufacturer.

When Preparing the Primer

Don't make up primer in a magazine or near excessive quantities of explosives or in excess of immediate needs.

Don't force a blasting cap or an electric blasting cap into dynamite. Insert the cap into a hole made in the dynamite with a suitable punch.

Do make up primers in accordance with proven and established methods. Make sure cap shell is completely encased in the dynamite and so secured that in loading no tension will be placed on the wires of fuse at the point of entry into the cap. When side priming a heavy wall or heavy weight cartridge, wrap adhesive tape around the hole punched in the cartridge so that the cap cannot come out.

When Shooting with Fuse

Do handle fuse carefully to avoid damaging the covering. In cold weather, warm slightly before using to avoid cracking the waterproofing.

Don't use short fuse. Know the burning speed of the fuse and make sure you have time to reach a place of safety after lighting. Never use less than 6 feet.

"Do not use less than 6 feet." The shortest safety fuse assembly made/sold is 6 feet or 2 meters, long. These fuse assemblies are now made up at the manufacturer. Safety fuse and caps are no longer sold separately, so that the blaster can make up his own lengths in the field and short-cut the minimum length requirement.

Don't cut fuse until you are ready to insert it into a blasting cap. Cut off an inch or two to insure a dry end. Cut fuse squarely across with a clean sharp

blade. Seat the fuse lightly against the cap charge and avoid twisting after it is in place.

Don't crimp blasting caps by any other means other than a cap crimper designed for the purpose. Make certain that the cap is securely crimped to the fuse.

Do light fuse with a fuse lighter designed for the purpose. If a match is used the fuse should be slit at the end and the match head held in the slit against the powder core. Then scratch the match head with an abrasive surface to light the fuse.

Don't light the fuse until sufficient stemming has been placed over the explosive to prevent sparks of flying match heads from coming into contact with the explosive.

Don't hold explosives in the hands when lighting the fuse.

Don't allow any instructions or any set of rules take the place of thoughtful caution and common sense when handling or using explosives.

When Shooting Electrically.

Don't uncoil the wires or use electric blasting caps during dust storms or near any other source of large charges of static electricity.

Don't uncoil the wires or use electric blasting caps in the vicinity of radiofrequency transmitters, except at safe distances Consult the manufacturers or the institute of makers of explosives pamphlet on

"Radio Frequency Hazards"

Do keep the firing circuit completely insulated from the ground or other conductors such as bare wires, rails, pipes or other paths of stray currents.

Don't have electrical wires or cables of any kind near electric blasting caps or other explosives except at the time and for the purpose of firing the blast.

Do test all electric blasting caps, either singly or when connected in a series circuit, using only a blasting galvanometer specifically designed for the purpose.

Don't use in the same circuit either electric blasting caps made by more than one manufacturer or electric blasting caps of different style or function even if made by the same manufacturer, unless such use is approved by the manufacturer.

Don't attempt to fire a single electric blasting cap on a circuit of electric blasting caps with less than the minimum current specified by the manufacturer.

Do be sure that all wire ends to be connected are bright and clean.

Do keep the electric cap wires or leading wires disconnected from the power source and short circuited until ready to fire.

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